

# DAILY FIELD ACTIVITY REPORT

**PROJECT NAME:** Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

<b>DATE:</b> July 12, 2018	<b>WEATHER:</b> Sunny High ~ 91degrees F
<b>Personnel and Visitors Onsite:</b> Research vessel Cayuse – <u>CDM Smith</u> : Mary Lou Fox; <u>Geosyntec</u> : Luke Smith; <u>AECOM</u> : Mark Tauscher; <u>Gravity Marine</u> : Maggie McKeon, Renea Trudeau	
<b>Planned Activity:</b> <ul style="list-style-type: none"> <li>At locations between RM 17 and RM19 to determine if anoxic conditions exist and evaluate the location for porewater sampling</li> </ul>	
<b>Activity Completed:</b> A tailgate safety meeting was led by AECOM. Topics discussed included the expected hot weather and likely increased recreational activities on the river; Willamette Park is the muster-point while working in the D/U reach.  Mary Lou Fox performed oversight of surface sediment sampling from 08:00 to 16:15 on board the Cayuse. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows: <ul style="list-style-type: none"> <li>Position check at PH-2 indicated that the vessel GPS was reading within 1.2 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.</li> <li>Calibration of the dissolved oxygen (DO) meter was performed at the sample processing facility in the morning prior to arriving at the boat launch and a photograph of the calibration notes was provided. The zero oxygen calibration was performed but no reading was recorded in the notes for 7/12/2018. A calibration check on the oxidation-reduction potential meter was also performed and documented in the field crew notes.</li> <li>One 1-point surface sediment sample was collected from a D/U location near RM 22.1 as summarized below.</li> <li>Porewater was pre-screened for anoxic conditions at 3 D/U locations between RM 17 and 20 in the D/U reach as summarized below.</li> <li>Activities included decontamination of sampling equipment using Alconox and deionized/distilled water, rinsing sensors/instruments with distilled water, and housekeeping of the sampling area.</li> </ul>	
<b>Status of Schedule &amp; Priority Work:</b> <ul style="list-style-type: none"> <li>Sampling will continue through Friday at D/U locations for surface sediment sampling and porewater sampling but is not likely to be completed. Sediment coring is planned to start next week after the 7/17/2018 kickoff meeting.</li> </ul>	
<b>Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):</b> AECOM and Geosyntec discussed bringing a porewater peeper out on Friday to test deployment. Two-point calibration records were confirmed (100% and zero oxygen DO solutions) Only one probe passed calibration today, so the other probe was not used. Calibration records: <ul style="list-style-type: none"> <li>Meter 1 YSI DO readings: 99.3% (@ 100% saturation), (zero calibration) – see note above</li> <li>Oakton ORP probe reading 230 mV (220 mV standard)</li> </ul> <p>At location S264, probing with a rod suggested that soft sediment may be present. A grab sample was retrieved, but the fines content was only about 5%. Sandy sediment was observed. The boat moved half-way to the shore and the bottom was probed in a parallel line along the shoreline (14 probes). An additional four (4) probes were done in the area, but all suggested sand. The location was determined to not be an acceptable location for porewater collection and no further testing conducted.</p>	
<b>Samples Collected, Measurements Made, Photographs: (List Locations, Matrix &amp; Sample type):</b> Porewater was screened for DO and ORP at 2 ,4, 6, 8 and 10 cm depths in the grab sample and at 10 cm depth via the in-situ rod mounted DO probe at the location below. Results are as follows: <ul style="list-style-type: none"> <li>SG/WP-B460– 75 FT ~ RM 17.1 W, ~70% fines, DO 0.42 to 0.28 mg/L, ORP 107.2 to 98.5 mV</li> <li>SG/WP-B466– ~ RM 18.6 W, ~50% fines, DO 0.49 to 0.28 mg/L, ORP 99.2 to 83.2 mV</li> <li>SG/WP-B468 – ~RM 18.8 E, ~50% fines, DO 0.59 to 0.27 mg/L, 105.4 to 84.7 mV</li> </ul> <p>Photographs of work were taken throughout the day and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.</p>	
<b>Borings Completed (Include total footage drilled for each boring):</b> None	

**Wastes Generated and How Handled:**

- Excess sediment and debris from today's sampling activities was rinsed back into the river per the FSP. No sheen was observed today.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily for disposal to a municipal waste management dumpster.

**Health and Safety Issues, Equipment Needs, Staffing:**

None observed

**Signature:**

Mary Lou Fox

**DATE**

July 12, 2018